

Novelties in *Prestonia* (Apocynaceae)

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ABSTRACT. *Prestonia folsomii* is described from Colombia and Panama. A new combination, *Prestonia longifolia* (Sessé & Mocino) J. F. Morales, is proposed, and two new synonyms of *Prestonia portobellensis* are given.

In preparing the treatment of Apocynaceae for *Flora Mesoamericana*, I encountered the following novelties here described.

Prestonia folsomii J. F. Morales, sp. nov. TYPE: Colombia. Valle: Buenaventura Municipio, Bajo Calima region: along the road between Buenaventura–Malaga at km 51.3, deep gorge in virgin forest, 100 m, 8 Feb. 1990 (fl), Croat & Watt 70348 (holotype, INB; isotypes, MO, USF). Figure 1.

A *Prestonia perplexa* foliis infra conspicuis puberulis, caulibus suberosis differt.

Liana, stems densely puberulent when young, soon usually becoming conspicuously suberose when fully mature. Leaves (2.5)4–12 × (1.8)2.5–5.5 cm, membranaceous, oblanceolate to oblong-obovate, caudate-mucronate at apex, cuneate to attenuate at base, very sparsely puberulent to glabrate above, beneath usually puberulent, eglandular; petiole 0.4–1.2 cm, stipular appendages interpetiolar, numerous. Inflorescence subumbelliform, racemose to subcorymbose, somewhat agglomerate, bearing 10–16 pale yellow flowers; peduncle 2.2–3.6 cm, pedicels 7–24 mm, both densely puberulent; bracts 2.5–4 × 1 mm, linear-ensiform, scarious; calyx lobes 8–13 × 3–4 mm, oblong-ovate to lanceolate, acute, very sparsely puberulent, soon becoming glabrate, the internal squamellae ca. 1 mm long, deltoid, glabrous, entire; corolla hypocrateriform, yellow or greenish yellow, glabrous or glabrate, tube 11–14 × 3–4 mm diam. at the orifice, epistaminal appendages ca. 2 mm, much surpassed by the anthers, inserted 1–1.5 mm below the faucal annulus; faucal annulus conspicuous, entire; lobes 1.2–1.4 cm × 8–9 mm, obliquely obovate to oblong-obovate, reflexed or widely spreading, usually obtuse; stamens inserted at about the upper 1/3 of the corolla tube, filaments

inconspicuous, glabrous, anthers 4–4.5 mm, glabrous, narrowly sagittate, exerted ca. 2–3 mm; ovary ca. 1 mm, ovoid, glabrous, shorter than the nectary; stigma ca. 1 mm, style 8–9 mm; nectary 1.5–2 mm long, 5-lobed. Follicles unknown.

Prestonia folsomii is found in forest, secondary growth, thickets, and along roadsides from eastern Panama to southeastern Colombia, at 100–800 m.

This new species is closely related to *Prestonia exserta* (A. DC.) Standley, but differs notably in the deeply inserted epistaminal appendages much surpassed by the anthers. In addition, it is related to *Prestonia perplexa* Woodson, but is easily distinguished by its leaves, which are conspicuously puberulent beneath, and by its usually suberose stems.

Prestonia folsomii is named for James Folsom in recognition of his extensive fieldwork in Panama while employed by the Missouri Botanical Garden.

Paratypes. PANAMA. **Coclé:** new works, 7 km N of El Copé, 750–800 m, 18 Aug. 1977, Folsom 4954 (MO). **San Blas:** El Llano–Cartí road, km 19, 350 m, 6 May 1985, de Nevers et al. 5620 (MO), 11 Mar. 1986, de Nevers et al. 7346 (MO, USF).

NOTES ON THE *PRESTONIA PORTOBELLENSIS* COMPLEX

When Woodson (1936) described *Prestonia guatemalensis* and *P. schippii* from Guatemala and Belize, respectively, he separated them from *P. portobellensis* (Beurling) Woodson by such features as the size of the calyx lobes, the exertion of the epistaminal appendages, and the amount of inflorescence development. Examination of the types and additional collections from the type locality of the former species shows that the characters used by Woodson are continuously variable and thus not useful for species distinction. Therefore, two new synonyms of *P. portobellensis* are proposed here.

Prestonia portobellensis (Beurling) Woodson, Ann. Missouri Bot. Gard. 18: 553. 1931. *Echites portobellensis* Beurling, Kongl. Vetensk. Acad. Handl. 1854: 137. 1856. TYPE: Panama. Colón: Portobello, in silvis ad littora, Apr. 1826, Billberg s.n. (holotype, S not seen; photograph MO).

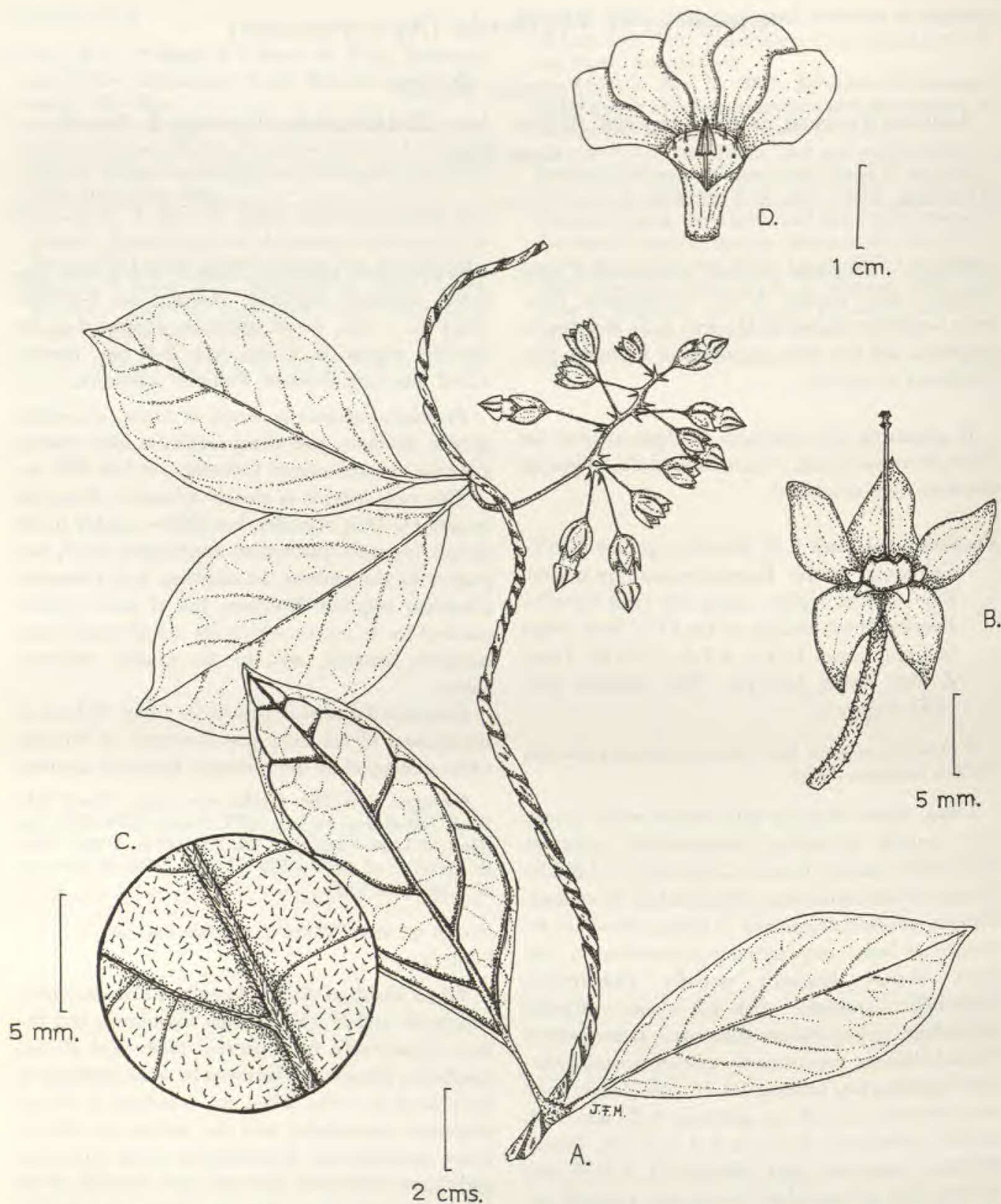


Figure 1. A–D. *Prestonia folsomii* J. F. Morales (Croat & Watt 70348). —A. Habit. —B. Calyx, nectary, stigma, style, and squamellae. —C. Pubescence of the leaves (beneath). —D. Open corolla showing anthers, epistaminal appendages, faucal annulus, and lobes.

Prestonia schippii Woodson, Ann. Missouri Bot. Gard. 23: 337. 1936. Syn. nov. TYPE: Belize. El Dorado, 80 m, Sep. 1922, Schipp s-388 (holotype, F; photograph INB).
Prestonia guatemalensis Woodson, Ann. Missouri Bot. Gard. 23: 339. 1936. Syn. nov. TYPE: Guatemala. Alta Verapaz: Sepacuite, Oct. 1901, Owen 1 (holotype, US; photograph INB).

In his monograph of the family, Woodson (1936) cited the name *Echites longifolia* Sessé & Mocino as “possibly referring to *Echites tuxtliensis* Standley” mainly due to the difficulty of interpreting the original descriptions of Sessé and Mocino and because of his inability to see type collections of the many

species described by them, which are deposited in the Madrid (MA) herbarium.

However, in the process of preparing the Apocynaceae for the *Manual de las Plantas de Costa Rica* and *Flora Mesoamericana*, a fragment of the type collection of *E. longifolia*, as well as the type of *Prestonia concolor* (S. F. Blake) Woodson, were examined. I conclude that these are identical, and thus a new combination based on the Sessé and Mocino name is made here.

Prestonia longifolia (Sessé & Mocino) J. F. Morales, comb. nov. Basionym: *Echites longifolia* Sessé & Mocino, Fl. Mexic. 45. 1893. TYPE: Mexico. Without data, Sessé *et al.* 5077 (holotype, MA not seen; fragment, F).

Belandra concolor S. F. Blake, Contr. Gray Herb. 52: 78. 1917. Syn. nov. *Prestonia concolor* (S. F. Blake) Woodson, in Standley & Record, Field Mus. Nat. Hist., Bot. Ser. 12: 327. 1936. TYPE: Belize. Low banks of Río Grande, 25 Mar. 1907, Peck 953 (holotype, GH).

Prestonia dentigera Woodson, Ann. Missouri Bot. Gard. 26: 258. 1939. Syn. nov. TYPE: Costa Rica. San José: vicinity of El General, Jan. 1939, Skutch 3864, (holotype, US).

Prestonia longifolia belongs to the section *Annulares* Woodson and is closely related to *P. portobellensis* (Beurling) Woodson, which has oblong to

oblong-lanceolate calyx lobes that are usually thick and apically acute to obtuse. However, sometimes in *P. portobellensis* the calyx is reduced and thus can be confused with the former species. In addition, both occur in the same geographical area: *P. longifolia* ranges from Mexico to Panama, while *P. portobellensis* ranges from Mexico to Colombia. The two species can be separated by the following key:

- 1a. Calyx lobes triangular-ovate to deltate, long-acuminate, 3–6 mm long; leaves usually thin and membranaceous *P. longifolia*
- 1b. Calyx lobes oblong to oblong-lanceolate, obtuse to acute, rarely acuminate (then larger than 10 mm), (7)9–18 mm long; leaves thick and subcoriaceous *P. portobellensis*

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Literature Cited

Woodson, R. E., Jr. 1936. *Prestonia*. In: Studies in the Apocynaceae IV. The American genera of Echitoideae. Ann. Missouri Bot. Gard. 23: 276–367.